

Name: _____

Date: _____

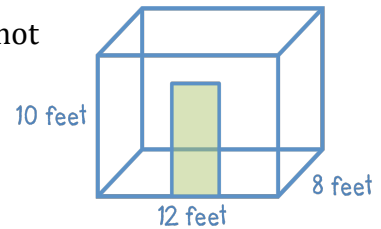
Math: _____

SURFACE AREA AND VOLUME WORD PROBLEMS HOMEWORK

Directions: For each problem, determine if it is asking about surface area or volume and defend your opinion using complete sentences. Solve the problem.

1. Surface Area or Volume. *Why?* _____

Katy is painting the walls of her bedroom, shown below. Katy will not paint the floor, the ceiling, or the door. Katy's door is 3 feet x 8 feet. If one quart of paint covers 100 square feet, how many quarts will Katy need to purchase?

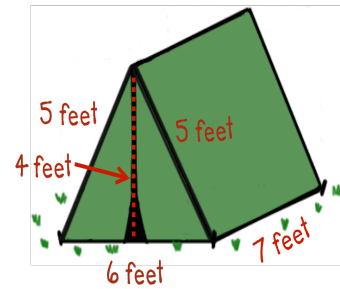


2. Surface Area or Volume. *Why?* _____

A cubic tank with sides 4.5 meters is filled with water. How much will be left in the tank if some is drained off to fill a cubic tank with sides 2.3 meters?

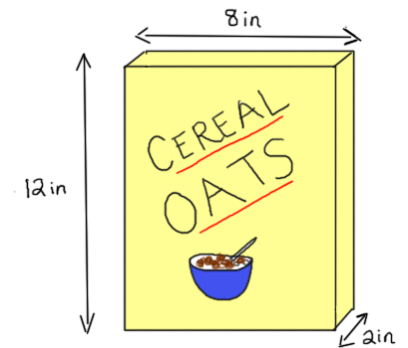
3. Surface Area or Volume. *Why?* _____

The dimensions of Bria's camping tent are shown below. The tent is not waterproof, so Bria wants to put a tarp over it, in case it rains. The tarp will cover two of the tent's rectangular faces. Which size tarp should she buy - the one that is 50 feet², 100 feet², or 150 feet².



4. Surface Area or Volume. *Why?* _____

Cereal boxes have the dimensions indicated in the illustration, to the left. The cereal box factory is about to close for the weekend, and there are just 1,000 in² of cardboard left. How many more cereal boxes can be produced at the factory with the remaining cardboard?



5. Surface Area or Volume. *Why?* _____

How much cat food will fit into a box that has a height of 4 inches, width of 6 inches, and length of 8 inches? If 1 oz fills 4 cubic inches, how much cat food can it hold in ounces?